DETAILED ACTION

1. In view of the Appeal Brief filed on 7/7/9, PROSECUTION IS HEREBY REOPENED. At the brief highlights the deficiencies of the previous art rejection. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614.

Claim Objections

2. Claim 1 and any claim dependent thereon objected to because of the following informalities: the claim is not a proper method claim. The claim should be recast in a form which positively recites the steps of the claimed method. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Farhangi et al. (US Patent 5647008 hereinafter Far) further in view of EBU/AES engineering guidelines (Copyright 1995 and hereinafter AES)

7. Regarding claim 1:

Far teaches:

A digital mixer functional to combine received audio bitstreams of various channel number and configuration to digitally merge the channels and produce a desired output. (Far: Column 3, lines 9-60; Fig 2: mixer combines 5.1 signals such as MPEG, stereo in the form of at least an encoded analog cd signal or standard AES/EBU signal, and an encoded microphone signal) The disclosed formats present configuration information relevant to at least channel configuration in the form of bit depth and sample rate to de-formatters functional to digitally extract raw audio data. (Far: Column 3, lines 9-60; Fig 2) Content formatting provided in at least the form of a target sampling frequency or preferred channel configuration, disclosed as a CD sampling frequency, allows content providers of CD audio to provide mixing information to the digital mixer in the form of at least a CD sampling frequency. (Far: Col 5, l. 37-60; Fig 5) The Far digital mixer reformats the mixed output through a formatter. (Far: Fig 2)

Far does not specify attaching channel configuration items to each input source and attaching an updated channel configuration item to the audio output by the formatter

AES discloses that AES/EBU data inherently includes configuration information, including at least a sampling rate field and bit depth field (AES: P 31.) As Far is silent regarding the type of formatting accomplished by his system, but discloses AES/EBU one of ordinary skill in the art would have found it obvious to utilize the AES/EBU format for the output of digital audio from the Far mixer. One of ordinary skill in the art would have expected predictable results from such a combination.

8. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Far further in view of EBU as applied to claim 1 above and further in view of Saunders et al. (US Patent 7266501.)

9. Regarding claim 2:

Far in view of AES does not teach producing multichannel audio output with an MPEG-4 format header.

In a related field of endeavor Saunders teaches:

An audio system functional to compress the output of an audio mixer by a CODEC inclusive of MPEG-4, based on the downstream device application to produce a compressed mixed digital master suitable for decoding by a downstream device. (Saunders: Col 6, l. 38-50; Col 8, l. 19-50) It would have been obvious to one of ordinary skill in the art at the time of the invention to include updating the Far in view of AES mixed digital audio output with updated configuration data in the form of the Saunders taught MPEG-4 CODEC. One of ordinary skill in the art would have expected predictable results from such a combination.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (Please see form PTO-892.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL MCCORD whose telephone number is (571)270-3701. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (571)272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. M./
Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614